



UNITED STATES PATENT AND TRADEMARK OFFICE

GN
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,055	05/01/2001	Philip Stark	126381.620	4565
7590	01/29/2004		EXAMINER	
RAYMOND A. MILLER PEPPER HAMILTON LLP ONE MELLON CENTER 50TH FLOOR 500 GRANT STREET PITTSBURGH, PA 15219			KOSLOW, CAROL M	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 01/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

E020

Office Action Summary	Application No.	Applicant(s)
	09/847,055	STARK ET AL.
	Examiner	Art Unit
	C. Melissa Koslow	1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 August 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 and 73-82 is/are pending in the application.

4a) Of the above claim(s) 73 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-24 and 74-82 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 5/1/01 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 19.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,6,7,8. 6) Other:

Art Unit: 1755

The references on the PTO-1449s having lines drawn through them are duplicate citations.

The species election requirement is withdrawn.

Applicant's election with traverse of Group I, claims 1-24 and 74-82 in Paper No. 18, dated 8/29/03 is acknowledged. The traversal is on the ground(s) that it is not a serious burden to search all the groups. This is not found persuasive because applicants have canceled claims 25-72 and 83-101 and accordingly these claims are not longer pending and thus the restriction over these claims cannot be withdrawn. With respect to the remaining claims, the recognized divergent subject matter is *prima facia* evidence of an undue burden to the search both the process of claim 73 and the compositions of claims 1-24 and 74-82.

The requirement is still deemed proper and is therefore made FINAL.

Claim 73 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 18.

The drawings are objected to because figures 18 and 19 are color drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Color photographs and color drawings are acceptable only for examination purposes unless a petition filed under 37 CFR 1.84(a)(2) is granted permitting their use as acceptable drawings. In the event that applicant wishes to use the drawings currently on file as acceptable drawings, a petition must be filed for acceptance of the color photographs or color drawings as acceptable drawings. Any such petition must be accompanied by the appropriate fee set forth in

Art Unit: 1755

37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings have been satisfied.

Claims 2, 14, 21, 74, 78 and 81 are objected to because of the following informalities: The names of the polymers in claims 14, 21 and 81 should be used in the claims, not their abbreviations. In claims 2, 74 and 78, the formula or name for "SrF" should be given, not applicants' abbreviation for this compound. Appropriate correction is required.

Claims 2, 14, 74 and 78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2, 74 and 78, the formula for Mea-2Y is incorrect. It should be 2(BaO:MeaO:3Fe₂O₃). Claim 14 is indefinite since it uses the trademark "MXD6" to define a compound. If the trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of the 35 U.S.C. 112, second paragraph. *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. Thus, the use of a trademark or trade

name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 6-8, 13, 74-80 and 82 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6 and 9 are of U.S. Patent No. 6,056,844. Although the conflicting claims are not identical, they are not patentably distinct from each other because the method of U.S. Patent No. 6,056,844 teaches susceptor particles of $\text{SrFe}_{12}\text{O}_{19}$ and Co-2Y and compositions or composites of these particles embedded in a thermoplastic, where the particles have a particle size in the range of 1-840 microns.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 74-77 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hibst (U.S. Patent 4,469,669) or Monovoukas (U.S. Patent 5,378,879).

These patents teach ferrite particles. Hibst teaches particles of strontium ferrite, Zn-2Y, (Mn,ZnO):Fe₂O₃, Co-2Y, Mn-2Y, and MebO:Fe₂O₃, where Meb is Zn, Mn or Co. Monovoukas teaches, in table 1, (Mn,ZnO):Fe₂O₃ and (Ni,ZnO):Fe₂O₃. The references clearly teach the claimed susceptors.

Claims 1-4, 6-8, 10, 74-79 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Childress (U.S. Patent 3,668,176).

This reference teaches a composite comprising a matrix having magnetic particles embedded therein. The magnetic particles can be strontium ferrite. The particles are present in the matrix in an amount of 20-50 vol%. The reference teaches the claimed composition, composite and susceptor.

Claims 1-4, 6-8, 13, 74-80 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison et al (U.S. Patent 4,693,775).

This reference teaches a composition and composite comprising magnetic particles embedding in a thermoplastic matrix. The particles are preferably strontium ferrite and they have a size within the range of 150-650 microns. This size range falls within the claimed range. The reference teaches the claimed composition, composite and susceptor.

Claims 1, 6, 9, 13, 14, 16 and 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Horiishi et al (U.S. Patent 5,123,989).

This reference teaches a composition and composite comprising barium ferrite particles embedded in a thermoplastic matrix. Barium ferrite is a hexagonal ferrite having a specific Curie

Art Unit: 1755

temperature. The thermoplastic can be polypropylene or polyethylene. The barium ferrite particles have a Curie temperature greater than the melting point of the thermoplastic matrix. The examples teach barium ferrite particles having a size of less than 1 micron. The reference teaches the claimed composition and susceptor.

Claims 17-21, 23 and 74-82 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodokian (U.S. Patent 5,248,864).

This reference teaches a composition and composite comprising magnetic particles embedded in a thermoplastic matrix, where the thermoplastic can be PEEK or PEKK. The magnetic particles can be manganese ferrite, which has the formula $MnO:Fe_2O_3$ and is a soft magnetic material. The Curie temperature of the particles is greater than the melting point of the thermoplastic. The reference teaches the claimed composition, composite and susceptor.

Claims 17-19, 22, 24, 74-79 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodokian (U.S. Patent 5,248,864).

This reference teaches a composition and composite comprising magnetic particles embedded in a silicone matrix. The magnetic particles can be nickel zinc ferrite, which has the formula $(Ni,ZnO):Fe_2O_3$. The Curie temperature of the particles is less than the melting point of the silicone since there is no indication that the silicone is melted when the ferrite is at its Curie temperature. The reference teaches the claimed composition, composite and susceptor.

Claims 1-7, 15, 17, 18, 22, 74-79 and 82 are rejected under 35 U.S.C. 102(b) as being anticipated by Tenzer (U.S. Patent 5,523,549).

This reference teaches a composition and composite comprising magnetic particles embedded in a silicone matrix or composition where ferrite particles are on the surface of a

Art Unit: 1755

browning plate, which would be the matrix for the composition. The magnetic particles are a mixture of soft magnetic ferrite, such as magnesium zinc ferrite and a high Cure temperature ferrite, such as strontium ferrite. The Curie temperature of the particles is less than the melting point of the silicone since there is no indication that the silicone is melted when the ferrite is at its Curie temperature. The reference teaches the claimed composition, composite and susceptor.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Childress.

As stated above, this reference teaches the claimed composition. The taught volume percentages overlap the claimed ranges. The taught particles are 74 microns or less, which overlaps the claimed range. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). The reference suggests the claimed composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

cmk
January 20, 2004


C. Melissa Koslow
Primary Examiner
Tech. Center 1700